

**Fig1. Single event echo-train**

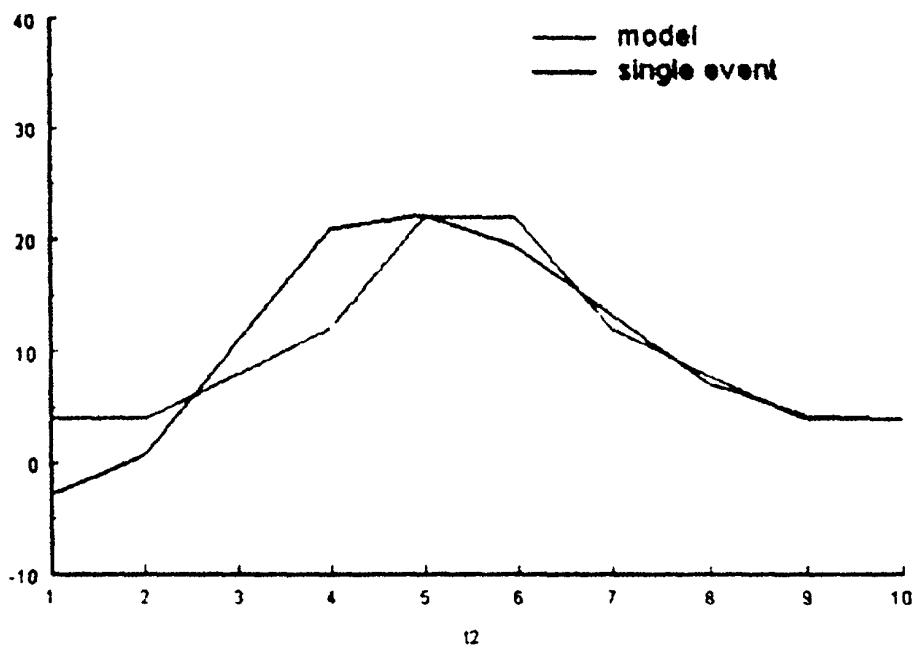


Fig.2 Model  $T_2$  distribution and Inverted  $T_2$  distribution from single echo-train data.

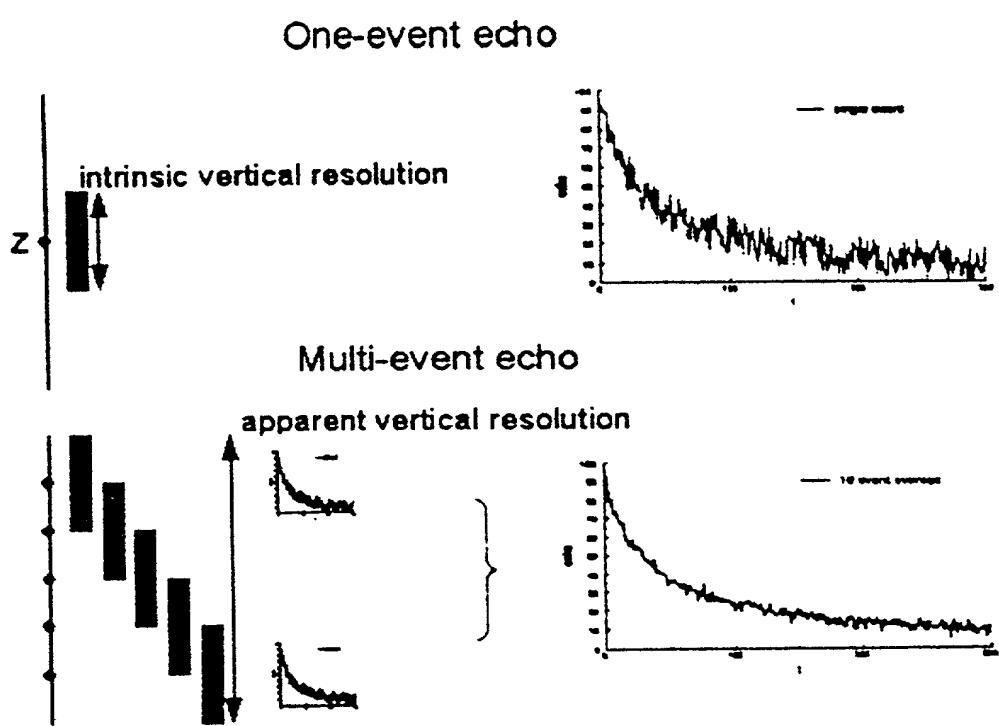


Fig.3 Multi-event echo stacking

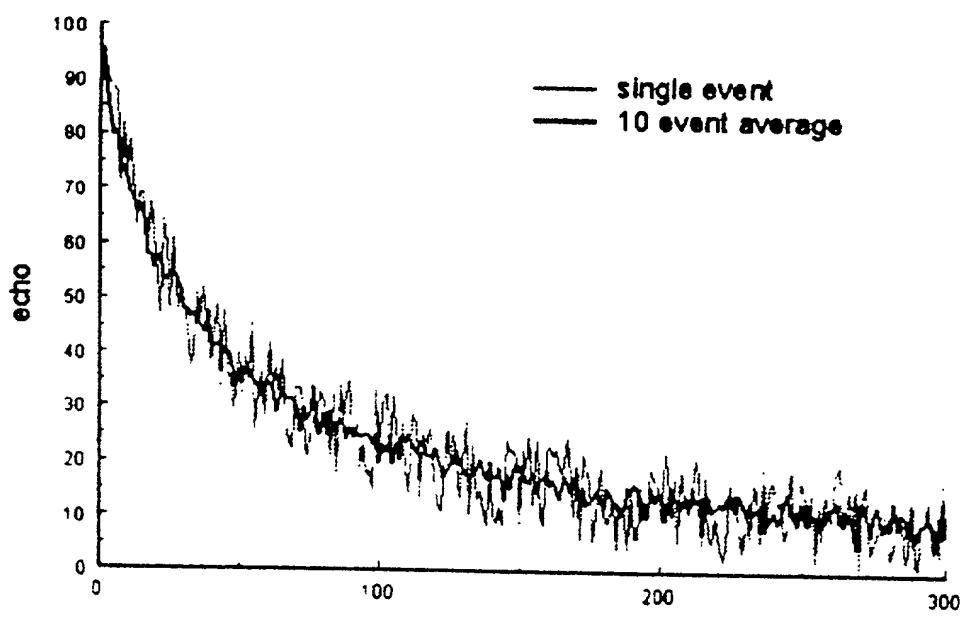


Fig.4 Stacked echo-train from 10 events

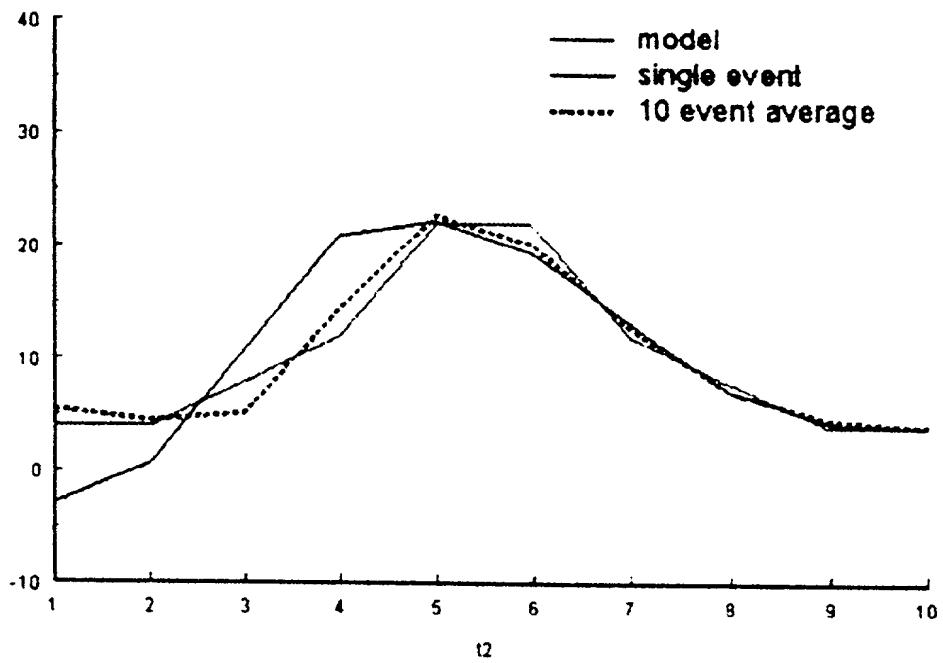
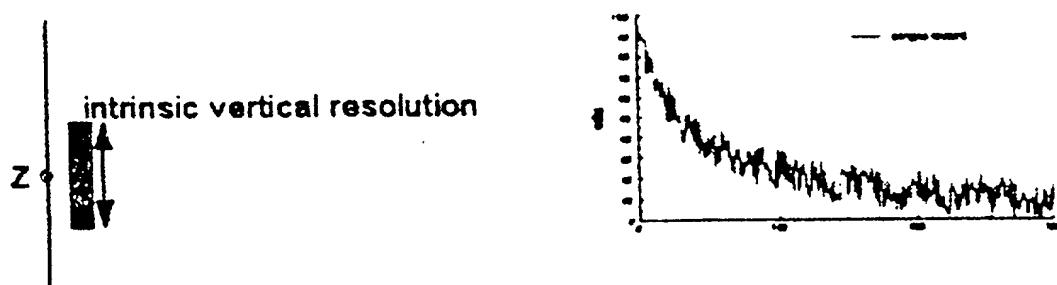


Fig.5 Inverted  $T_2$  distribution from stacked echo-train data.

### One-event echo



### Time-domain average

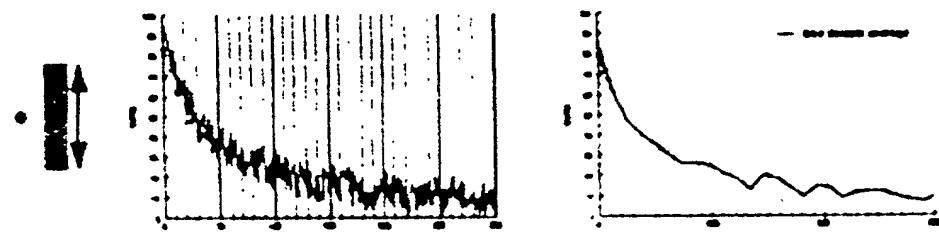


Fig.6 Time-domain average

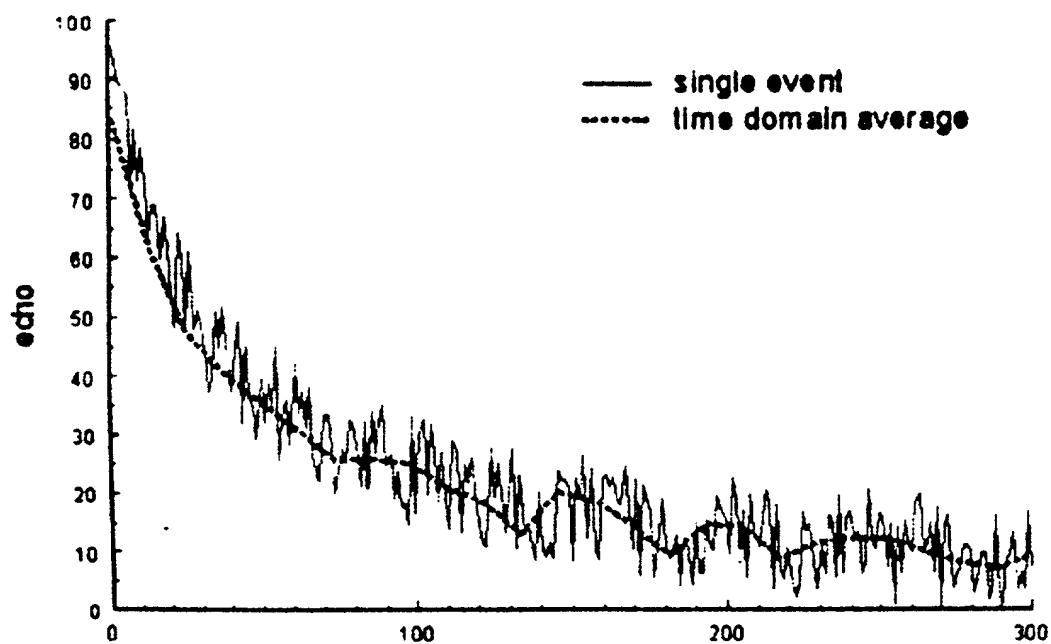
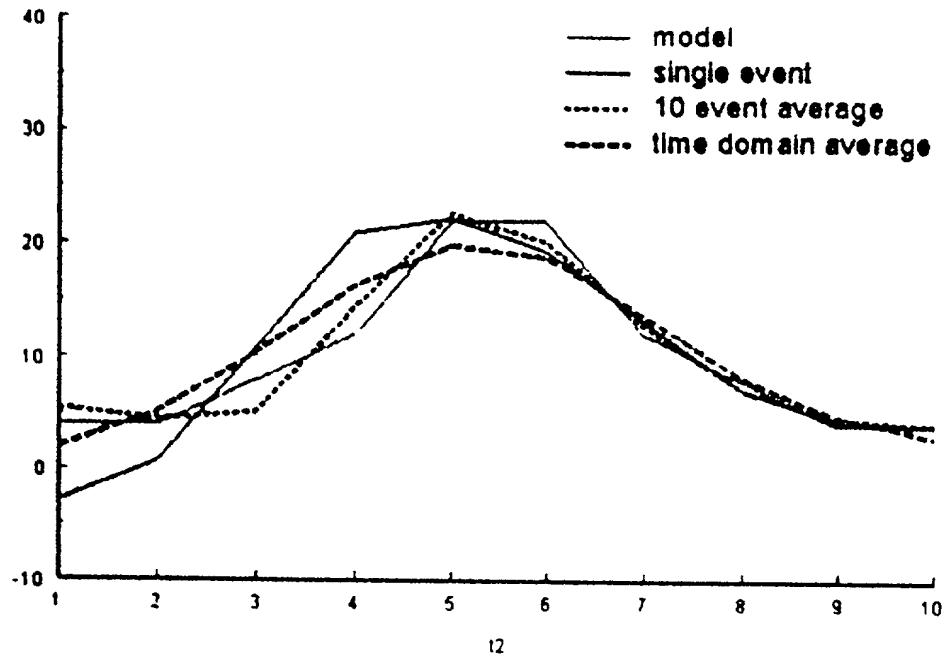


Fig.7 Time-domain averaged echo-train data.



**Fig.8** Inverted  $T_2$  distribution from time-domain averaged echo-train.